Hazard Identification and Mitigation (HI&M) Training

Recommended Total Time: 30 minutes

Introduction to the Course

Welcome and Introductions

The Facilitator performs a self-introduction and welcomes and introduces Guests. Participants introduce themselves by giving their names and describing their background in the Weatherization Assistance Program (WAP).

Course Purpose and Goal

The course will provide a consistent approach to conveying information about natural hazard identification, assessment, and mitigation to State Energy Monitors and Community Action Group (CAG) inspectors. It is designed to integrate the activities of State and Federal agencies and enhance the delivery of federal, state and local services to citizens.

Inspectors will be able to maximize the effectiveness of program resources for the homes of targeted low-income community members who have qualified and been chosen to participate in the Department of Energy – Federal Emergency Management Agency programs for Weatherization Assistance and Hazard Identification and Mitigation.

Course Objectives

After completing the course, you will be able to:

- Determine the relative risks from flood, wind, earthquake and fire to your locality
- Recognize the risks in the home being inspected
- Determine appropriate mitigation measures to assist targeted low-income community members to:
 - Reduce the potential risks associated with natural hazard events to their safety, health and homes,
 - Lessen their inconvenience and costs from damage
- Use the resources of this program, the WAP and other sources to implement the appropriate mitigation measures
- Maximize the benefits to the homeowner from all associated programs

The Purpose of the Hazard Identification and Mitigation Training

The costs of providing federal assistance to communities after natural disasters have been very high. Many residents have been displaced from their homes and experience major disruptions to their lives as well as high costs and inconvenience while their homes are being repaired.

To meet the need to reduce these losses of life and property and reduce the inconveniences to affected homeowners, FEMA and DOE have instituted this Hazard Identification and Mitigation (HI&M) training initiative. It is a proactive effort before a disaster to assist residents by identifying the hazards that threaten them and their property.

The training will enable you to identify a home's particular risks and effective mitigation measures. You will also receive educational materials for residents to encourage them to take an active role in continuing to protect their homes.

- This Workshop Manual is designed to be a self-contained instructor and participant guide, aimed at State energy representatives and weatherization inspectors.
- The material contained in this manual, particularly the exercises and concept development, is most effective in a one-day, facilitated workshop. This should be combined with "on-the-job" follow-up training.
- The manual, provided in paper and electronic copy, should be customized for delivery by concentrating on local hazards, examples and applications.

Integration of the DOE Weatherization Assistance Program and the Hazard Identification and Mitigation Training Many agencies are concerned with meeting the needs of citizens to improve their dwellings, their quality of life and reduce overall federal expenditures. In this instance, FEMA is working with the DOE, whose Weatherization Assistance Program provides services to targeted low-income residents to improve the energy efficiency of their homes.

Using the same person, trained and knowledgeable about both programs, to inspect a home and determine the most appropriate weatherization and mitigation measures maximizes the effectiveness of resources.

This training manual uses worked examples in each unit and two complete case studies to illustrate the application of the training to the inspection process.

The Critical Steps

In this course, you will practice using the following Critical Steps to implement the HI&M program as effectively as possible.

The critical steps for figuring out which mitigation measures to recommend for a particular home are:

- 1. Identify the relative risks to your locality for each natural hazard. (Tools are available from FEMA, such as a Flood Insurance Rate Map (FIRM) for flooding, the American Society of Civil Engineers for wind risk; the United States Geological Survey (USGS) for maps for earthquake risk, and the National Wildland/Urban Interface Fire Protection Program for a Peak Fire Seasons map.)
- 2. Focus your assessment on the hazards that offer the highest relative risks to your area.
- 3. Identify appropriate mitigation measures for the home you are inspecting. Mark all your identified mitigation measures on the Action Checklist.
- 4. Consider the possibility of using other funds and programs to supplement this program.
- 5. Use the Cost Sheet to determine the cost of implementing the mitigation measures.
- 6. To maximize the benefit from a given mitigation measure you should consider the effect of the WAP and other programs on your choices.
 - 7. Decide which measures on the Action Checklist have the greatest effectiveness.
 - 8. Talk to the homeowner. As you leave, express your thanks for allowing your visit.

The following agenda shows exactly how we will proceed, unit by unit, to achieve the objectives.

If a recommendation is being made for the weatherization program there may be a good opportunity to combine with a mitigation measure

Agenda and Timeframes

Time	Unit Content
8:00 – 8:30	Unit 1: Introduction
	A. Introduction of Guests, Facilitator and Participants
	B. Presentation of Course Objectives
	C. Discussion of the purpose of the Hazard Identification and Mitigation Program
	D. Integration of the DOE Weatherization Assistance Program and FEMA's Hazard Identification and Mitigation Initiatives; Other Programs
8:30 – 9:30	Unit 2: Identify the Hazards
	A. Flood: How to Determine Flood Hazard – Read a Flood Insurance Rate Map (FIRM), National Flood Insurance Program
	B. Wind: How to Determine Wind Risk – Read a Wind Zone Map
	C. Earthquake: How to Determine Earthquake Risk – Read a Earthquake Zone Map
	D. Fire: How to Determine Fire Risk – Read a Fire Risk Map
	E. Determine the Greater Relative Risks for Your Area
9:30 – 9:45	Break
9:45 – 2:15	Unit 3: Recognize the Risks and Mitigation Measures
	Use the Action Checklist and Fact Sheets for:
9:45 – 10:45	A. Flood Hazard
10:45– 11:30	B. Wind Hazard

Unit 1: Introduction

11:30-11:45	Break
11:45 – 12:30	C. Earthquake Hazard
12:30 – 1:30	Lunch
1:30 – 2:15	D. Fire Hazard
2:15 – 4:45	Unit 4: Integrate Costs, Relative Benefits and the WAP
2:15 – 2:25	A. Overview of Unit 4
2:25 – 2:55	B. Determine Costs
2:55 – 3:10	Break
3:10 – 3:40	C. Integrate the WAP Recommendations and Consider Overall Cost Benefits
3:40– 3:50	D. Make Final Decision
3:50 – 4:10	Break
4:10 – 4:25	E. Final Exercise
4:25 – 4:35	F. Discussion of the Final Exercise
4:35 – 4:45	Unit 5: Appendix
4:45 – 5:00	Course Evaluation